

CHRISTIAN FAITH AND EVOLUTION

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**Lecture Three
"Beyond Fundamentalism"
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What fundamentalism is: a working definition

The two central ideas of Darwinian Evolution are (1) common descent and (2) natural selection. Common descent means that all creatures on earth, humans included, are descended from common ancestors. Natural selection is the process through which species evolve and multiply.

In a discussion about Christian Faith and Evolution, when I hear the word “fundamentalist,” this is what it normally will bring to mind: *a Christian who for reasons of faith accepts a literal interpretation of the creation stories in the book of Genesis—and who therefore rejects those two central ideas of Darwinian Evolution.*

This is, as we all know, a powerful theological position in American Christianity. This morning, I am going to address weaknesses in that position, as I see them, speaking Christian to Christian on the basis of a common faith.

What fundamentalism was: an historic definition

I would like to point out that historically fundamentalism has not always been quite so tightly identified with literal interpretations of the Bible.

As I mentioned last week, one of the theological fathers of fundamentalism was B.B. Warfield, and when Warfield read the *Origin of Species*, he found that he was able to accept the argument. This was because, as a member of a cattle-breeding family, he had an intuitive appreciation for the theory's scientific plausibility; moreover, his theological training had prepared him to see that the Christian tradition could accommodate natural selection as a perfectly acceptable means that God would have of "making things make themselves" within the scope of divine Providence.

That means that Warfield did not consider himself bound to interpret scripture literally at all points.

Let us take note of the fact that, at its origin, the Fundamentalist Movement does not seem to have insisted on biblical literalism at this point as one of its defining "fundamentals," even as it did expressly require a literal interpretation on some other issues.

The Five Fundamentals were:

- (1) Inspiration and Infallibility of Scripture
- (2) Deity of Christ (including the Virgin Birth)
- (3) A Substitutionary doctrine of the Atonement
- (4) Christ's Literal Resurrection from the Dead
- (5) Christ's Literal Return at the Second Coming

So that is a much broader set of concerns than is acknowledged in my working definition of fundamentalism.

As we move forward, we will have in mind the fact that today's fundamentalism is one position within a broader evangelical tradition.

I am going to refer to that broader tradition as "conservative evangelicalism."

Conservative Evangelicalism’s thesis of non-compatibility

Warfield representing an exception...

From the beginning until now, from this sector there has been strong resistance to evolutionary theory. This Tuesday’s *Wall Street Journal* cites a 2009 Gallop poll finding that “44% of Americans believe that God created human beings in their present form within the past 10,000 years.”¹

I suppose they believe that, because that is what they learned from church.

This class is a defense of the Anglican thesis of compatibility. In this alternative Christian tradition, we meet the thesis of non-compatibility—even among the non-fundamentalists, as we will see.

There are clearly many Christians who believe that, in order to defend the truth of Christian faith, one must attack the science of Darwinian evolution.

¹ Melinda Beck, “Obesity? Big Feet? Blame Darwin,” *Wall Street Journal*, Feb. 23, 2010, Section D, pages 1-2. Perhaps this resistance has been formed of ignorance, and stoked by the kind of low-brow anti-intellectualism that has long been ridiculed by writers like H.L. Mencken, and in films like *Inherit the Wind*. Historians, however, can identify other factors in the resistance. One of them is that they could see the social uses that were being made of Darwin’s theory. If there were currents of anti-intellectualism abroad in the early 20th century, there were strong currents of anti-humanity abroad as well. The algorithm of natural selection was being applied to the struggle between races, nations, and classes of people in ways that were profoundly at odds with the value that the Christian faith would place on human beings. Some of the critics of the fundamentalists, including the Scopes attorney Clarence Darrow, were advocates of appalling theories about human worth and moral responsibility.

An evolving argument

One of the books I have recommended for this class is Ted Peters and Martinez Hewlett's *Evolution from Creation to New Creation: Conflict, Conversation and Convergence*. This book shows the development of an attack on Darwinian evolution through three stages:

1. Biblical Creationism
2. Scientific Creationism
3. Intelligent Design Theory

Biblical Creationism refers to a literal interpretation of the Genesis accounts as an alternative theory of human origins, grounded on a doctrine of biblical inerrancy. It asks Christians to accept the truth of this account on faith in the Bible as God's revealed Word.

Scientific Creationism is an adaptation of the same theory, now using scientific data and argumentation. Evidence, especially from apparent discrepancies in the fossil record, is used to support faith in the literal interpretation of the Bible as God's revealed Word. One of Scientific Creation's products was the "Creation Science" curriculum that found its way into Arkansas law in 1981. That is when the legislature passed, and the governor signed, Act 590, for "Balanced Treatment for Creation-science and Evolution-Science." The law was struck down by the Federal Court in the important case *McLean v. Arkansas Board of Education*.²

² *McLean v. Arkansas Board of Education*, 529, F. Supp. 1255 (E.D. Ark. 1982).

Introducing Intelligent Design

That brings us to *Intelligent Design*, which represents the most recent stage of this attack on Darwinian evolution, and which was also the subject of a federal court decision.

In 2004, the Dover, Pennsylvania school board passed a resolution stating that "Students will be made aware of gaps/problems in Darwin's theory and of other theories of evolution including, but not limited to, intelligent design." In *Kitzmiller v Dover*, the court ruled that this policy was unconstitutional "pursuant to the Establishment Clause of the First Amendment to the United States Constitution."³

You may find it interesting to know that *Intelligent Design Theory* does not defend a literal interpretation of the Genesis account at all.

William Dembski, a philosopher and mathematician trained at the University of Chicago, is the program's leading theorist. Given my definitions, I believe it would be accurate to say that he is a conservative evangelical, but not a fundamentalist.

"The central issue," he writes, "is not the relatedness of all organisms, or what typically is called common descent. Indeed, Intelligent Design is perfectly compatible with common descent. Rather,

³ *Kitzmiller v Dover Areas School District*, 400 F. Supp. 2d 707 (M.D. Penn. 2005).

the central issue is how biological complexity emerged and whether intelligence played an indispensable (which is not to say exclusive) role in its emergence.”⁴

⁴ William A. Dembski, “The Logical Underpinnings of Intelligent Design,” in *Debating Design: From Darwin to DNA*, ed. William A. Dembski and Michael Ruse (Cambridge: Cambridge University Press, 2004), 323.

Intelligent Design's Critique of Theistic Evolution

Dembski considers himself an opponent of Theistic Evolution.

Intelligent Design theorists believe that in asserting compatibility between religion and evolutionary science, Theistic Evolution is actually a program of theological capitulation. That is Dembski's view. Despite the fact that he seems willing to accept the tree of life, and to acknowledge that natural selection has *some* power in effecting change in populations of organisms over time (microevolution), Dembski repudiates Theistic Evolution. Intelligent Design, he says, is "incompatible with what is typically meant by 'theistic evolution,'" adding that "theistic evolution takes the Darwinian picture of the world and baptizes it, identifying this picture with the way God created life."⁵

⁵ William Dembski, *Intelligent Design: The Bridge between Science and Theology* (Downer's Grove, Ill.: InterVarsity Press, 1999), 110.

Intelligent Design's Attack Against "Darwinism and its Naturalistic Legacy"

Dembski says that Intelligent Design is: 1) "A scientific research program that investigates the effects of intelligent causes," 2) "An intellectual movement that challenges Darwinism and its naturalistic legacy," and 3) "a way of understanding divine action."⁶

⁶ Dembski, *Intelligent Design*, 13.

Intelligent Design’s attack on Darwinian evolution as science

So the Intelligent Design program has both philosophical and scientific arguments against the scientific mainstream. Its main line of scientific attack is against the explanatory power of natural selection. Here the question is not “Do species evolve?” Granted that they do evolve, and even granting that all species now on earth may have evolved from common ancestral sources, is Darwin’s theory—“descent with modification through variation and natural selection”⁷—powerful enough to account for this?⁸

This is not a new challenge, and it does not come only from conservative evangelicals. Many distinguished scientists have doubted the explanatory sufficiency of natural selection. As I believe I have mentioned, the theory’s *other* author, Alfred Russel Wallace, became himself increasingly skeptical of natural selection’s power to explain the evolution of the human brain, and began to look to some order of supernatural explanation.⁹ Wallace remained an evolutionist, but wound up a spiritualist as well. Darwin’s ally T.H. Huxley had no tolerance for spiritualism, but he had his own

⁷ Darwin, *Origin of Species*, 612.

⁸ Dembski, “Logical Underpinnings,” 323. See note 41 in the introduction.

⁹ “As the co-discoverer of natural selection, Wallace became one of the theory’s most consistent supporters during the 1860s, less willing than Darwin to accept a role for other mechanisms of evolution. Yet by the end of the decade he began to argue that many aspects of the human mind can have conferred no selective advantage and thus cannot have been developed by evolution. . . . Wallace finally came out openly in favor of the view that some form of supernatural guidance had shaped the later stages of human evolution.” Bowler, *Monkey Trials*, 130–31.

reservations about the power of selection. He looked for other, supplementary natural explanations—or rather, accepting the facts of evolution and common descent, increasingly played down the question of how they came about.¹⁰

Today, that question remains open to several active lines of inquiry representing various schools of thought. Intelligent Design theorists want the same consideration for their thesis as would be accorded to these others who doubt the power of selection. Their thesis is that structures and processes can be identified in nature that bear tell–tale traces of “design.” Some things in nature happen by chance, others by necessity, and many by chance and necessity in combination. But there are other things that could only have happened by design. They were made by someone or thing that knew what it was doing. Writes Dembski: “The world contains events, objects and structures that exhaust the explanatory resources of natural causes and that can be adequately explained only by recourse to intelligent causes.” And we have the tools to know such things when we encounter them. “Precisely because of what we know about natural causes and their limitations, science is now in a position to demonstrate intelligent causation rigorously.” That is the theoretical crux of Intelligent Design.¹¹

¹⁰ According to Bowler, Huxley “wasn’t very interested in adaptation, and saw natural selection as a plausible hypothesis that might explain some aspects of evolution, but could not be the main mechanism. . . . In the end, Huxley helped divert attention away from natural selection and the study of evolutionary mechanism, creating an evolutionary project quite different from the one that Darwin had envisaged.” Bowler, *Monkey Trials*, 104–05.

¹¹ Dembski, *Intelligent Design*, 47.

Irreducible complexity

Dembski is the program's leading theorist. Michael Behe is the biochemist who has ventured far out on a scientific limb, trying to deliver on the premise. The key notion for Behe is "irreducible complexity." One of his prize exhibits has been the famous bacterium flagellum, a fascinating case of a microorganism with something like an outboard motor on its rump. Such a structure is argued to defy explanation by natural selection, and to require an explanation of design.¹² An irreducibly complex structure defies explanation by natural selection because the logic of evolutionary adaptation requires that any new character or trait selected for must bestow a functional advantage at every step in its development. These irreducibly complex structures, Behe wants to show, can deliver no functional advantage until the entire apparatus is fully assembled and ready to go to work. "Like a mousetrap."¹³

¹² Michael Behe, "Irreducible Complexity: Obstacle to Darwinian Evolution," in Dembski and Ruse, *Debating Design*, 352–370.

¹³ "The logical structure of the argument to design is a simple inductive one: whenever we see such highly specific interactions in our everyday world, whether in a mousetrap or elsewhere, we unfailingly find that the systems were intentionally arranged—that they were designed." Behe, "Irreducible Complexity," 355.

A reasonable rejoinder to Intelligent Design

By way of response I would argue for a nuanced, rather than an unqualified rejection of Intelligent Design. We have to critique it, but obviously we need to be careful that our critique is consistent with our own beliefs as Christians.

Two years ago, there was a very nice article in the journal *Zygon*, by a writer named Jeffrey Koperski, titled, "Two Bad Ways to Attack Intelligent Design and Two Good Ones."¹⁴ This argument, to my eye, has the nuance we are looking for.

¹⁴ Jeffrey Koperski, "Two Bad Ways to Attack Intelligent Design and Two Good Ones," *Zygon* 43, no. 2 (2008):433-49.

Scientific Rejoinder

Regarding the scientific argument, there is a powerful, straightforward rebuttal. In the *Wall Street Journal* article to which I earlier referred, there is a discussion of the ways scientists now “see the 21st century human body as a collection of compromises, jury-rigged by evolution as our ancestors adapted to changing conditions.”¹⁵

What evolutionary scientists would have us understand about natural selection is its genius for making do with what’s available— *bricolage*. (This is also called “exaptation.”) As Philip Kitcher explains, the selection process is always tinkering. Kitcher cites Stephen Jay Gould’s example of the giant panda’s thumb as a good case in point. Though they belong to the order of carnivores, these pandas adapted to a diet of bamboo. This was a challenge, because the pandas had lacked the opposable thumbs that could help them get a good handle on that bamboo. So natural selection took the available wrist bone and extended it until, *voilà*: something like a thumb. Writes Kitcher: “It does not work well. Any competent engineer who wanted to design a giant panda could have done better. But it works well enough.”¹⁶ Such maneuvers are facilitated by the redundancy that is characteristic of DNA. Genetic redundancy allows that duplicate organic bits and pieces that may have evolved to fill a certain function can be expropriated to serve altogether different needs in a changed environment. Arthur Peacocke is among those who think that, for this and other reasons, natural

¹⁵ Melinda Beck, *Wall Street Journal*, Feb. 23, 2010, D1-2.

¹⁶ Kitcher, *Abusing Science*, 139.

selection is much more resourceful, and thus powerful, than Behe would imagine, and that “the mousetrap analogy is a false trail.”¹⁷

Kenneth Miller has carried that argument a step further, by drawing from published studies to map plausible lines of evolutionary development for the bacterial flagellum and other candidates for irreducible complexity. Certainly in the court of informed opinion, Miller’s arguments have put Behe on his heels.¹⁸ So one answer to Intelligent Design is that it is simply wrong about the power of selection. It can build that mousetrap after all.

In truth, it remains to be seen whether natural selection is as powerful as some scientists have claimed. For now, however, that view holds the advantage over the argument from Intelligent Design.

Koperski’s critique of Intelligent Design as science is rather different, but also important. To this point, ID has not generated significant results of a kind that prove out a scientific program. There is no record of fulfilled predictions. Until it establishes a record of that kind, ID cannot be taken seriously as science.

¹⁷ Peacocke, *Paths*, 69–70.

¹⁸ Miller, *Finding Darwin’s God*, 140–57.

Theological Rejoinder

Beyond the scientific issue, there is a question of whether Intelligent Design theorists have not overlooked an important distinction between what is called "levels of explanation." Since all Christians presumably believe in a kind of divine design, the issue is whether that should be considered a theological or philosophical, as opposed to a scientific, explanation.

My own view is that there are cases where that distinction begins to break down, and on that point I am prepared to defend the proponents of Intelligent Design. I do that in my dissertation.

In general, though, I think it is an important distinction, and Intelligent Design theorists have created some problems by failing to maintain it. By giving the impression that there is a choice to be made between natural selection and divine design, they are bringing God down to the level of one among several possible natural explanations, as though God were not also the transcendent cause of any and every possible natural explanation.

In terms of our discussion last week, they are missing the infinite and qualitative difference between natural "secondary" causes and God as the transcendent, primary cause. It is as though there might said to be two theories for a steamboat accident in *Huckleberry Finn*: either (a) the Pilot fell asleep and ran into a snag, or (b) Mark Twain did it. There is a confusion of categories here.

Note for readers, skip for class

When the Intelligent Design controversy was at its height, Cardinal Christoph Schönborn created consternation in Theistic Evolution circles with a *New York Times* opinion essay titled “Finding Design in Nature.”¹⁹ This statement was read by many as portending an about-face by the Catholic hierarchy concerning evolution. In 1996, Pope John Paul II had publicly acknowledged the scientific merit of evolutionary theory and recognized that it belongs within the theological scope of Catholic teaching.²⁰ Schönborn now contended that too much had been made of the Pope’s statement, given that the Pope had certainly regarded evolution as unfolding under divine direction, and according to a plan. As described by neo-Darwinists, evolution is unguided and unplanned, while according to the Christian doctrine of providence, no events can be unplanned from the vantage point of God.²¹ That doctrine led Cardinal Schönborn into the conflict between Darwinian theory and Intelligent Design, which concerns whether the processes of evolution could have arrived at the complex

¹⁹ Christoph Schönborn, “Finding Design in Nature,” *New York Times*, July 7, 2005.

²⁰ John Paul II, “Message to Pontifical Academy of Sciences,” October 22, 1996, in Russell, Stoeger and Ayala, *Evolutionary and Molecular Biology*, 2–9.

²¹ Stephen M. Barr, “The Design of Evolution,” *First Things: The Journal of Religion, Culture and Public Life*, no. 156 (October 2005): 9–12. Barr offers a superb summary and response to Schönborn’s statement. Barr, a theoretical particle physicist, is a Roman Catholic. He argues that the doctrine of providence, as traditionally developed by Aquinas, and recently reiterated specifically in relation to evolution by the Catholic Church’s International Theological Commission, carries a truth that is independent of the role that natural selection may play in the evolutionary saga. Double Agency is strongly implicated in Barr’s paper.

diversity we find in nature without intelligent, i.e. divine, direction. It appeared to Cardinal Schönborn that the viability of a doctrine of Providence was at stake in this dispute. In a response to Schönborn, the scientist-theologian Robert John Russell explains that scientific and philosophical explanations work at different levels. He argues that when Pope John Paul affirmed an overarching divine design, he was taking a philosophical rather than scientific position. The problem for Christian theology is not with neo-Darwinian scientific theory, but with its co-option to serve the purposes of naturalism as a world view. Writes Russell: "It is [the] reductionist and materialistic philosophy as an interpretation of evolution, which Christians must oppose. In its place, Christians must offer an alternative interpretation of neo-Darwinian evolution that recognizes it as ultimately the work of God."²²

I agree with that, and that is what we are doing here . . . within the framework of classical theology.

²² Russell, "Response to Cardinal Schönborn," 197.

In sum

There is a scientific issue about the power of natural selection. Intelligent Design theorists have taken a stand on that scientific issue, and to this point they have not been able to build a convincing case.

The more important point is that, theologically, they are overstating the implications of the scientific issue.

The theological problem with the Intelligent Design Program, in my view, is its failure to take full account of the radical meaning of divine transcendence, God's "infinite and qualitative difference" from the world he has created. Because God's will exists "beyond the realm of existents," as Aquinas put it, the notion of divine design transcends the question of whether natural selection is powerful enough to account for complexity.

In the framework of classical theology, natural selection can have all the power Darwin could have hoped for, and remain within the overarching scope of God's purposeful design.

Thus, classical theology takes us "beyond Intelligent Design."

A Faithful Reply to Fundamentalism

I want to return now to fundamentalism as I defined it at the beginning of this talk.

What is the problem with the fundamentalist's idea that, for the love of Christ, and for the sake of faith in his name, we must hold on to belief in the literal meaning of Genesis, against common descent and evolution by natural selection?

The First Reason

The first reason is that, in the name of faith, this creates a stumbling block to faith.

Early in the history of the church, St. Augustine pointed out this problem. Augustine said that Christians must recognize that even non-Christians, who for lack of faith would be in the dark concerning matters of God, may know quite a lot about the world based on experience and reason.

He specifically mentions expert knowledge of the size, position and motion of the sun, moon, and stars, and about rocks, animals, and plants. "This knowledge," he writes, the expert "holds to as being certain from reason and experience."

Now experts are human beings too, and our goal is to increase their joy, and ours, by helping them towards the illumination of faith. Yes?

Augustine has described the situation now regarding evolution. Experts in the sciences are broadly convinced that, on the main points, Darwin's theory is correct. They hold to this "as being certain from reason and experience."

In such a case, as Augustine continued, when someone insists that we must read portions of the bible in a way that sets our interpretation odds with scientific knowledge, this brings the whole of scripture, and faith itself, into disrepute.

He writes:

“If they find a Christian mistaken in a field which they themselves know well and hear him maintaining his foolish opinions about our books, how are they going to believe our books in matters concerning the resurrection of the dead, the hope of eternal life, and the kingdom of heaven, when they think their pages are full of falsehoods on facts which they themselves have learnt from experience and the light of reason?”²³

Augustine, in short, would not have Christians standing on interpretations of Scripture that defy good judgment based on science. He is actually quite harsh in his condemnation of Christians that do this.

So, following Augustine, for the love of Christ, and for the sake of faith in his name, we should be very reluctant, to say the least, to place faith in opposition to expert scientific knowledge.

²³ Stephen Barr, *Modern Physics and Ancient Faith*, 7. Augustine concludes: “Reckless and incompetent expounders of Holy Scripture bring untold trouble and sorrow in their wise brethren, . . . to defend their utterly foolish and obviously untrue statements, they will try to call upon Holy Scripture, . . . although they understand neither what they say nor the things about which they make assertion.”

The second reason

To require a literal interpretation of Genesis as an article of faith, as fundamentalists would do, is actually helping a true enemy of faith keep fresh straw in his argument against religion. It offers aid and comfort to the enemy.

I am thinking now of Richard Dawkins. Dawkins circles the globe promoting a caricature of faith—a straw man.

“Faith [he says] is the great cop-out, the great excuse to evade the need to think and evaluate evidence. Faith is belief in spite of, even perhaps because of, the lack of evidence. . . . Faith is not allowed to justify itself by argument.”²⁴

He also says that faith “means blind trust, in the absence of evidence, even in the teeth of evidence.”

Dawkins wants to make a case that “*faith* is one of the world’s great evils, comparable to the smallpox virus but harder to eradicate. Faith, being belief that isn’t based on evidence, is the principle vice of any religion.”²⁵

What is the Christian faith’s rejoinder?

²⁴ Richard Dawkins, quoted in Alister McGrath, *Dawkins’ God: Genes, Memes, and the Meaning of Life* (Oxford: Blackwell Publishing, 2005), 84.

²⁵ Ibid.

It is to hoist Dawkins on his own petard. Dawkins represents himself as a champion of evidence, but there is very little evidence, and none of it good, to support what he says by way of defining faith.

I am drawing now from a book by Alister McGrath: *Dawkins' God: Genes, Memes, and the Meaning of Life*. When Dawkins defines faith as belief against the evidence, McGrath points out that there is no good evidence to support this definition.

When Dawkins tells us that faith means "blind trust in the absence of evidence," McGrath retorts that "this may be what Dawkins thinks; it is not what Christians think."²⁶

He also writes:

"The simple fact is that Dawkins offers no defense of [his definition of faith], which bears little relation to any religious (or any other) sense of the word. No evidence is offered that it is representative of religious opinion. No authority is cited in its support. I don't accept this idea of faith, and I have yet to meet a theologian who takes it seriously. It cannot be defended from any official declaration of faith from any Christian denomination. It is Dawkins' own definition, constructed with his own agenda in mind, being represented as if it were characteristic of those he wishes to criticize."²⁷

²⁶ McGrath, *Dawkins' God*, 86.

²⁷ *Ibid.*, 85.

To make his point, McGrath cites a representative view concerning a Christian view of faith, a "good and reliable definition." It comes from an Anglican theologian named W.H. Griffiths-Thomas, who writes:

"[Faith] affects the whole of man's nature. It commences with the conviction of the mind based on adequate evidence; it continues in the confidence of the heart or emotions based on conviction, and it is crowned in the consent of the will, by means of which the conviction and confidence are expressed in conduct."²⁸

I can tell you that is a common, text-book view of faith, as involving knowledge, trust and commitment: "the head, the heart the hands."

²⁸ McGrath, 86.

So, if I may, I would like to appeal to our fellow Christians to please not give Richard Dawkins ammunition!

In promoting the idea that faith does in fact require believing in something against all the scientific evidence, not only would we be disregarding the consistent teaching of our theological tradition, we would be a source of aid and comfort to the enemy, allowing Dawkins a whisk of a pretext to continue promoting his straw man.

McGrath has got him cornered: don't give him a way out!

The third reason

There is third reason that, for the love of Christ and for the cause of faith, we must let go of a literal interpretation of the book of Genesis. It is that in so doing we rediscover a rather remarkable connection between the ancient Christian theological tradition and the modern science of evolution.

It is a fascinating fact of historical theology that Augustine made his argument about faith and reason in the context of developing his own non-literal interpretation of the book of Genesis, an interpretation that in certain respects anticipates evolutionary theory.

I am drawing here from Ernan McMullin's work on Augustine and the literal interpretation of the book of Genesis.

As McMullin explains, the fact that modern Christians have accepted evolutionary theory on good scientific evidence, and are now probing its relation to the doctrine of Creation, "would delight Augustine." This is because Augustine could justifiably claim he had (almost) seen it coming. In *De Genesi ad literam* ("On the Literal Meaning of Genesis"), Augustine indicated interest in the possibility that creation had unfolded slowly through a developmental process.

Indeed, Augustine's own reflections on Genesis lead him to an interpretation that strikingly resembles an evolutionary understanding of organic development. His reading of the Bible did not suggest to him that the species, or kinds, of creatures of the earth had been created in a single stroke. Rather, there was reason to suppose that some of the animals and plants were at the beginning

present only as potential. The elements were there, "seeds," as it were, from which the creatures would develop. Thus Augustine imagined "a causal potency," in McMillan's words, "within which the future is at least partially contained." God would use another of his creatures, time, to bring these potentials to fruition.²⁹

Thus, as McMullin concludes:

[There] is something to be said for situating Augustine at the head of the lineage not of evolutionary theory but of attempts to show how the notions of evolution and creation may fit together. He clearly saw that a Creator of the sort he envisaged could bring the kinds of things to be in either of two different ways: either by an original miraculous intervention in each case or by the use of the natural order itself to develop the various kinds in a gradual way. He did not try to decide between the two; all he wanted to convey was that scripture is open to either interpretation.³⁰

²⁹ Ernan McMullin, "Introduction: Evolution and Creation," in *Evolution and Creation*, ed. Ernan McMullin (Notre Dame: University of Notre Dame Press, 1985), 16.

³⁰ *Ibid.*, 15.

The pay-off

This openness concerning scripture creates openings for faith.

This is born out in the intellectual and spiritual life of Francis Collins. Collins, now head of the National Institutes of Health, became famous as the geneticist who led the International Human Genome project to successful completion of its goal of mapping Human DNA—a sequence of nucleotides three billion characters in number.

Collins is also, as he discloses in his recent book, an adult convert to Christian faith. In accounting for the fact that he is both a “rigorous scientist” and a “serious believer in a transcendent God;” and in arguing that “the principles of faith are, in fact, complementary with the principles of science,” Collins draws explicitly from Augustine.³¹ “I will argue,” as he writes, “that if we wisely apply Saint Augustine’s advice, crafted well over a thousand years before there was any reason to be apologetic about Darwin, we will be able to find a consistent and profoundly satisfying harmony between these world–views.”³²

³¹ Francis Collins, *The Language of God* (New York: Free Press, 2006), 1–3.

³² *Ibid.*, 83–84.

And that’s exactly what every faithful person, and every scientist, should want: harmony among the various pieces of our understanding of the world.

That’s what I mean in talking about a “a comprehensive, integrated worldview, where religious belief and scientific knowledge coalesce.”

There are few things that can better serve to advance the cause of faith in Christ, than to show its fit with our knowledge and experience of the world.

Next week: “Beyond Liberalism.”